

LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) An information processing apparatus which causes a predetermined service providing apparatus which provides a predetermined service, to execute processing concerning a service providing request made by a terminal via a network, said information providing apparatus comprising:

~~a responding part which makes a response configured to cause the service providing apparatus to execute a plurality of processing units as the processing based on a single service providing request made by said terminal asynchronously with respect to a completion of the processing which is caused to be executed by said service providing apparatus;~~

~~a processing state obtaining part which obtains respective processing states of the plurality of processing units a state of the processing concerning the service providing request[[],] from said predetermined service providing part apparatus; and~~

~~a Web page generating part which, in response to a Web page display request made by said terminal, generates a Web page to display the state of processing states of the plurality of processing units by displaying the states of the plurality of processing units which is obtained via said processing state obtaining part, and transmits the thus-produced Web page to said terminal without waiting for respective completions of processing by the plurality of processing units, wherein:~~

~~said Web page generating part generates the Web page in which the state of at least one of the plurality of processing units can be omitted from the Web page display of the states of the plurality of processing units according to a request made by the terminal.~~

2. (Currently Amended) The information processing apparatus as claimed in claim 1, further comprising a processing information managing part which manages identification information of the processing concerning the service providing request, wherein:

 said responding part registers the identification information of the processing in said processing information managing part, and

 said processing state obtaining part obtains ~~the state of the processing~~ states of the plurality of processing units for which the identification information is registered in said processing information managing part.

3. (Currently Amended) The information processing apparatus as claimed in claim [[1]] 2, wherein:

 said processing information managing part further manages information concerning a position of the service providing apparatus which is caused to execute the processing concerning the service providing request, and information concerning a method for obtaining ~~the state of the processing~~ states of the plurality of processing units.

4. (Currently Amended) The information processing apparatus as claimed in claim 3, wherein:

 said processing state obtaining part obtains the processing ~~state~~ states of the plurality of processing units from the service providing apparatus based on the information managed by said processing information managing part in response to [[a]] the Web page display request made from said terminal.

5. (Original) The information processing apparatus as claimed in claim 1, wherein:

 said responding part causes the service providing apparatus to execute the processing by transmitting a request for execution of processing concerning the service providing request, to the service providing apparatus.

6. (Currently Amended) The information processing apparatus as claimed in claim 5,

wherein:

 said responding part obtains information concerning a method for obtaining the processing state states of the plurality of processing units from the service providing apparatus as a response to the request for execution of the processing concerning the service providing request; and

 said processing state obtaining part obtains the processing state states of the plurality of processing units based on the information concerning the method for obtaining the processing state states of the plurality of processing units obtained via the responding part.

7. (Currently Amended) The information processing apparatus as claimed in claim 6,

wherein:

 in case a plurality of methods for obtaining the processing state states of the plurality of processing units obtained by the responding part are managed in the a processing information managing part, said processing state obtaining part obtains the plurality of processing states based on the respective ones of the plurality of methods for obtaining the processing state states of the plurality of processing units.

8. (Currently Amended) The information processing apparatus as claimed in claim 5,

wherein:

 said processing state obtaining part transmits a processing state sending request to a processing state providing apparatus which provides the processing state states of the plurality of processing units which the service providing apparatus is caused to execute, and receives the processing state which is states of the plurality of processing units sent by the processing state providing apparatus in response to the processing state sending request.

9. (Currently Amended) The information processing apparatus as claimed in claim 5, further comprising a processing state receiving part receiving the processing state states of the plurality of processing units from the service providing apparatus, wherein

 said Web page generating part generates [[a]] the Web page displaying the processing state states of the plurality of processing units received via the processing state receiving part.

10. (Currently Amended) The information processing apparatus as claimed in claim 6, wherein:

 said processing state obtaining part transmits a processing state sending request to the service providing apparatus, and receives the processing state states of the plurality of processing units sent from the service providing apparatus in response to the sending request.

11. (Currently Amended) The information processing apparatus as claimed in claim 6, wherein:

the information concerning the method for obtaining the processing state states of the plurality of processing units comprises information concerning a position of a processing state providing apparatus which provides the processing state states of the plurality of processing units; and

 said processing state obtaining part transmits a processing state sending request to the processing state providing apparatus specified by the position information, and receives the processing state states of the plurality of processing units sent by said processing state providing apparatus in response to the sending request.

Claim 12 (Canceled).

13. (Currently Amended) The information processing apparatus as claimed in claim [[12]] 2, wherein:

 said processing information managing part manages information concerning the position of the service providing apparatus which is caused to execute each of the plurality of processing units, the information concerning the method for obtaining the processing state for each of the plurality of processing units, and also, request identification information assigning a common value for the plurality of processing units to be executed based on the common service providing request made by the terminal.

14. (Original) The information processing apparatus as claimed in claim 13, wherein:

 said processing state obtaining part identifies processing based on the common service providing request made by the terminal based on the above-mentioned request

identification information, and, thus, obtains the respective processing states of the plurality of processing units based on the common service providing request based on the information managed by said processing information managing part.

15. (Currently Amended) The information processing apparatus as claimed in claim [[12]] 1, wherein:

 said responding part causes a plurality of respective service providing apparatuses to execute the respective ones of the plurality of processing units.

16. (Currently Amended) The information processing apparatus as claimed in claim [[12]] 1, wherein:

 said Web page generating part generates the Web page displaying in an integration manner the respective processing states of the processing units based on the common service providing request obtained via the processing obtaining part.

Claim 17 (Canceled).

18. (Currently Amended) The information processing apparatus as claimed in claim 1, further comprising a detailed information page generating part which generates [[a]] the Web page displaying detailed information of the processing state states of the plurality of processing units in response to a request made by the terminal.

19. (Original) The information processing apparatus as claimed in claim 1, wherein:

 said Web page generating part obtains predetermined information from a plurality of service providing apparatuses based on a request made by the terminal,

and generates the Web page displaying the obtained information in respective ones of a plurality of divisional areas of the page.

20. (Original) The information processing apparatus as claimed in claim 19, further comprising a page information managing part which manages a structure defining display contents with eXtensible Markup Language for respective ones of the plurality of divisional areas of the Web page for each user, wherein
said Web page generating part generates the Web page based on the structure.

21. (Currently Amended) The information processing apparatus as claimed in claim 20, wherein:

 said Web page generating part generates the Web page in a manner such that the processing state states of the plurality of processing units concerning the service providing request is displayed in one of the plurality of divisional areas.

22. (Currently Amended) An information processing method for an information processing apparatus which causes a predetermined service providing apparatus which provides a predetermined service, to executes execute processing concerning a service providing request made by a terminal via a network, said information providing method comprising:

 a responding step of making a response to causing the service providing apparatus to execute a plurality of processing units based on a single service providing request made by said terminal asynchronously with respect to a completion of the processing which is caused to be executed by said service providing apparatus;

a processing state obtaining step of obtaining respective processing states of the plurality of processing units ~~a state of the processing~~ concerning the service providing request[[],] from said predetermined service providing part apparatus; and

a Web page generating step of, in response to a Web page display request made by said terminal, generating a Web page to display the state of processing states of the plurality of processing units by displaying the states of the plurality of processing units which is obtained in said processing state obtaining step, and transmitting the thus-produced Web page to said terminal without waiting for respective completions of processing by the plurality of processing units, wherein:

said Web page generating step generates a Web page in which the state of at least one of the plurality of processing units can be omitted from the Web page display of the states of the plurality of processing units according to a request made by the terminal.

23. (Currently Amended) The information processing method as claimed in claim 22, wherein:

 said responding step comprises a step of registering identification information of the processing in a processing information managing part managing identification information of the processing concerning the service providing request, and

 said processing state obtaining step comprises a step of obtaining the state of the processing states of the plurality of processing units for which the identification information is registered in said processing information managing part.

24. (Currently Amended) The information processing method as claimed in claim 23, wherein:

said processing information managing part further manages information concerning a position of the service providing apparatus which is caused to execute the processing concerning the service providing request, and information concerning a method for obtaining the state of the processing states of the plurality of processing units.

25. (Currently Amended) The information processing method as claimed in claim 24, wherein:

 said processing state obtaining step comprises a step of obtaining the processing state states of the plurality of processing units from the service providing apparatus based on the information managed by said processing information managing part in response to the Web page display request made from said terminal.

26. (Original) The information processing method as claimed in claim 22, wherein:

 said responding step comprises a step of causing the service providing apparatus to execute the processing, by transmitting a request for execution of processing concerning the service providing request, to the service providing apparatus.

27. (Currently Amended) The information processing method as claimed in claim 26, wherein:

 said responding step comprises a step of obtaining information concerning a method for obtaining the processing states state of the plurality of processing units from the service providing apparatus as a response to the request for execution of processing concerning the service providing request; and

said processing state obtaining step comprises a step of obtaining the processing state states of the plurality of processing units based on the information concerning the method for obtaining the processing state states of the plurality of processing units obtained in the responding step.

28. (Currently Amended) The information processing method as claimed in claim 27, wherein:

 said processing state obtaining step comprises a step of, in case a plurality of methods for obtaining the processing state states of the plurality of processing units obtained in the responding step are managed by ~~the~~ a processing information managing part, obtaining the plurality of processing states of the plurality of processing units based on the respective ones of the plurality of methods for obtaining the processing state states of the plurality of processing units.

29. (Currently Amended) The information processing method as claimed in claim 26, wherein:

 said processing state obtaining step comprises a step of transmitting a processing state sending request to a processing state providing apparatus which provides the processing state states of the plurality of processing units which the service providing apparatus is caused to execute, and receiving the processing state which is states of the plurality of processing units sent by the processing state providing apparatus in response to the processing state sending request.

30. (Currently Amended) The information processing method as claimed in claim 26, further comprising a processing state receiving step of receiving the processing state states of the plurality of processing units from the service providing apparatus, wherein

 said Web page generating step ~~comprises a step of~~ includes generating [[a]]
 the Web page displaying the processing state states of the plurality of processing units received in the processing state receiving step.

31. (Currently Amended) The information processing method as claimed in claim 27, wherein:

 said processing state obtaining step comprises a step of transmitting a processing state sending request to the service providing apparatus, and receiving the processing state states of the plurality of processing units sent from the service providing apparatus in response to the sending request.

32. (Currently Amended) The information processing method as claimed in claim 27, wherein:

 the information concerning the method for obtaining the processing state states of the plurality of processing units comprises information concerning a position of the processing state providing apparatus which provides the processing state states of the plurality of processing units; and

 said processing state obtaining step comprises a step of transmitting a processing state sending request to the processing state providing apparatus specified by the position information, and receiving the processing state states of the plurality of processing units sent by said processing state providing apparatus in response to the sending request.

Claim 33 (Canceled).

34. (Currently Amended) The information processing method as claimed in claim [[33]] 23, wherein:

 said processing information managing part manages information concerning the position of the service providing apparatus which is caused to execute each of the plurality of processing units, the information concerning the method for obtaining the processing state for each of the plurality of processing units, and also, requested identification information assigning a common value for the plurality of processing units to be executed based on the common service providing request made by the terminal.

35. (Original) The information processing method as claimed in claim 34, wherein:

 said processing state obtaining step comprises a step of identifying processing based on the common service providing request made by the terminal based on the above-mentioned requested identification information, and, thus, obtaining the respective processing states of the plurality of processing units based on the common service providing request based on the information managed by said processing information managing part.

36. (Currently Amended) The information processing method as claimed in claim

[[33]]22, wherein:

said responding step comprises a step of causing a plurality of respective service providing apparatuses to execute the respective ones of the plurality of processing units.

37. (Currently Amended) The information processing method as claimed in claim [[33]] 22, wherein:

 said Web page generating step comprises a step of generating the Web page displaying in an integration manner the respective processing states of the processing units based on the common service providing request obtained in the processing obtaining step.

Claim 38 (Canceled).

39. (Currently Amended) The information processing method as claimed in claim 22, further comprising a detailed information page generating step of generating a Web page displaying detailed information of the processing state states of the plurality of processing units in response to a request made by the terminal.

40. (Original) The information processing method as claimed in claim 22, wherein:

 said Web page generating step comprises a step of obtaining predetermined information from a plurality of service providing apparatuses based on a request made by the terminal, and generating the Web page displaying the obtained information in respective ones of a plurality of divisional areas of the page.

41. (Original) The information processing method as claimed in claim 40, further comprising a page information managing step of managing a structure defining display contents with eXtensible Markup Language for respective ones of the plurality of divisional areas of the Web page for each user, wherein

 said Web page generating step comprises a step of generating Web page based on the structure.

42. (Currently Amended) The information processing method as claimed in claim 40, wherein:

 said Web page generating step comprises a step of generating the Web page in a manner such that the processing ~~state~~ states of the plurality of processing units concerning the service providing request is displayed in one of the plurality of divisional areas.

43. (Currently Amended) An information processing program provided on a computer readable recording medium, said information processing program causing an information processing apparatus which causes a predetermined service providing apparatus which provides a predetermined service, to ~~executes~~ execute processing concerning a service providing request made by a terminal via a network, to perform:

 a responding step of ~~making a response to~~ causing the service providing apparatus to execute a plurality of processing units based on a single service providing request made by said terminal ~~asynchronously with respect to a completion of the processing which is caused to be executed by~~ said service providing apparatus;

a processing state obtaining step of obtaining respective processing states of the plurality of processing units a state of the processing concerning the service providing request[[],] from said predetermined service providing part apparatus; and

a Web page generating step of, in response to a Web page display request made by said terminal, generating a Web page to display the state of processing states of the plurality of processing units by displaying the states of the plurality of processing units which is obtained in said processing state obtaining step, and transmitting the thus-produced Web page to said terminal without waiting for respective completions of processing by the plurality of processing units, wherein:

said Web page generating step generates a Web page in which the state of at least one of the plurality of processing units can be omitted from the Web page display of the states of the plurality of processing units according to a request made by the terminal.

44. (Currently Amended) The information processing program provided on a computer readable recording medium as claimed in claim 43, wherein:

 said responding step comprises a step of causing the service providing apparatus to execute the processing, by transmitting a request for execution of processing concerning the service providing request, to the service providing apparatus.

Claims 45-46 (Canceled).

47. (Currently Amended) A service providing apparatus which executes processing concerning the service providing request sent from the information processing apparatus claimed in claim 1, comprising:

a processing state obtaining information sending part sending, to the information processing apparatus, processing state obtaining information which enables obtaining a completion notification and a processing state states of the plurality of processing units, before the completion of the processing, wherein,

in response to an obtaining request made by the information processing apparatus requesting the processing state states of the plurality of processing units concerning the service providing request based on the processing state obtaining information, the service providing apparatus sends the processing state states of the plurality of processing units to the information processing apparatus.

48. (Original) The service providing apparatus as claimed in claim 47, wherein:

the processing state obtaining information comprises information which enables, for the information processing apparatus, obtaining the processing state of the processing which is executed by another service providing apparatus.

49. (Original) The service providing apparatus as claimed in claim 47, wherein:

the processing state obtaining information sending part sends the processing state obtaining information in a form of a structure in which the processing state obtaining information is described with eXtensible Markup Language as an element thereof.

50. (Currently Amended) The service providing apparatus as claimed in claim 49,

wherein:

 said processing state obtaining information comprises identification information for identifying the processing concerning the service providing request and information concerning a method for obtaining the processing state states of the plurality of processing units executed by the service providing apparatus.

51. (Currently Amended) A service providing method for a service providing apparatus which executes processing concerning the service providing requested sent from the information processing apparatus claimed in claim 1, comprising:

 a processing state obtaining information sending step of sending, to the information processing apparatus, processing state obtaining information which enables obtaining a completion notification and [[a]] processing state states of the plurality of processing units, before the completion of the processing; and

 a processing state sending step of, in response to an obtaining request made by the information processing apparatus requesting the processing state of the processing concerning the service providing request based on the processing state obtaining information, sending the processing state states of the plurality of processing units to the information processing apparatus.

52. (Currently Amended) The service providing method as claimed in claim 51,

wherein:

 the processing state obtaining information comprises information which enables obtaining, for the information processing apparatus, the processing state states of the plurality of processing units executed by another service providing apparatus.

53. (Original) The service providing method as claimed in claim 51, wherein:

the processing state obtaining information sending step comprises a step of sending the processing state obtaining information in a form of a structure in which the processing state obtaining information is described with eXtensible Markup Language as an element thereof.

54. (Currently Amended) The service providing method as claimed in claim 53,

wherein:

said structure comprises identification information for identifying the processing concerning the service providing request and information concerning a method for obtaining the processing ~~state~~ states of the plurality of processing units executed by the service providing apparatus.

55. (Currently Amended) A service providing program ~~for provided on a computer readable recording medium, said information processing program~~ causing a service providing apparatus which executes processing concerning the service providing request made by the information processing apparatus claimed in claim 1, to perform:

a processing state obtaining information sending step of sending, to the information processing apparatus, processing state obtaining information which enables obtaining a completion notification and [[a]] processing ~~state~~ states of the plurality of processing units, before the completion of the processing; and

a processing state sending step of, in response to an obtaining request made by the information processing apparatus requesting the processing state of the processing concerning the service providing request based on the processing state obtaining information, sending the

processing ~~state~~ states of the plurality of processing units to the information processing apparatus.

Claim 56 (Canceled).